

10/549929

IN THE CLAIMS JC17 Rec'd PCT/PTO 20 SEP 2005

Please amend the claims as follows:

Claim 1 (Currently Amended): Pyrogenically A pyrogenically produced silicon dioxide powder having a specific surface area of between 5 and 600 m<sup>2</sup>/g and a carbon content of less than 500 ppm, characterised in that it wherein the pyrogenically produced silicon dioxide powder displays

- a specific dibutyl phthalate absorption of less than or equal to 1.2 g dibutyl phthalate/100 g SiO<sub>2</sub> per m<sup>2</sup> of specific surface area
- and a specific thickening effect of less than 15 mPas per m<sup>2</sup> of specific surface area.

Claim 2 (Currently Amended): Silicon The pyrogenically produced silicon dioxide powder according to claim 1, characterised in that wherein the specific compacted bulk density is between 1000 and 10000 g/l x m<sup>2</sup> of specific surface area.

Claim 3 (Currently Amended): Silicon The pyrogenically produced silicon dioxide powder according to claims 1 or 2, characterised in that claim 1, wherein the chloride content is less than 50 ppm.

Claim 4 (Currently Amended): Process A process for the production of the pyrogenically produced silicon dioxide powder according to claims 1 to 3, characterised in that claim 1, wherein

- vaporous tetramethoxysilane and/or tetraethoxysilane together with air or with oxygen-enriched air and
- separately hydrogen
- are supplied to a burner, and the mixture of gases is allowed to react in a flame in a reaction chamber connected in series to the burner, and the solid reaction product is separated from the gas stream by known means,
- the lambda value in the burner being between 0.95 and 1.5 and
- sufficient secondary air also being supplied to the reaction chamber that the lambda value in the reaction chamber is between 0.8 and 1.6.

Claim 5 (Currently Amended): ~~Process~~ The process according to claim 4,  
~~characterised in that~~ wherein the volume ratio of oxygen/hydrogen in the burner is between 0.2 and 2.8.

Claim 6 (Currently Amended): ~~Process~~ The process according to claims 4 or 5,  
~~characterised in that~~ claim 4, wherein the discharge velocity of the gases leaving the burner is at least  $10 \text{ ms}^{-1}$ .

Claim 7 (Currently Amended): ~~Aqueous~~ An aqueous dispersion containing  
comprising the pyrogenically produced silicon dioxide powder according to claims 1 to 3  
claim 1.

Claim 8 (Currently Amended): ~~Aqueous~~ The aqueous dispersion according to claim 7, characterised in that wherein the content of silicon dioxide in the dispersion is between 20 and 80 wt.%.

Claim 9 (Currently Amended): ~~Aqueous~~ The aqueous dispersion according to claims 7 or 8, characterised in that claim 7, wherein the average aggregate diameter in the dispersion is less than 200 nm.

Claim 10 (Currently Amended): ~~Aqueous~~ The aqueous dispersion according to claims 7 to 9, characterised in that it claim 7, wherein the aqueous dispersion contains additives.

Claim 11 (Currently Amended): ~~Process~~ A process for the production of the aqueous dispersion according to claims 7 to 10, characterised in that claim 7, wherein the pyrogenically produced silicon dioxide powder according to claims 1 to 3 is incorporated with a dispersing device into water, which can be stabilised by the addition of bases or cationic polymers or aluminium salts or a mixture of cationic polymers and aluminium salts or acids, and is then dispersed.

Claim 12 (Currently Amended): Use of the silicon dioxide powder according to claims 1 to 3 claim 1 in dispersions, as a filler in rubber, silicone rubber and plastics, to adjust the rheology in paints and coatings, as a support for catalysts.

Claim 13 (Currently Amended): Use of the dispersion according to claims 7 to 10 claim 7 for the production of glass articles, for chemical mechanical polishing, for the production of inkjet papers.

Claim 14 (New): A composition comprising the pyrogenically produced silicon dioxide powder according to claim 1.

Claim 15 (New): The composition as claimed in claim 15 wherein the composition is rubber, silicone rubber, plastic, paint, a coating, a catalyst support, a glass article, a chemical mechanical polish, or an inkjet paper.

Claim 16 (New): A method of producing the composition as claimed in claim 14 comprising adding the pyrogenically produced silicon dioxide powder according to claim 1 to the composition during the manufacture of the composition.

Claim 17 (New): A method of adjusting the rheology of paint or a coating comprising adding the pyrogenically produced silicon dioxide powder to the paint or the coating.

Claim 18 (New): A filler comprising the pyrogenically produced silicon dioxide powder according to claim 1.

Claim 19 (New): An article comprising the filler as claimed in claim 18 wherein the article is a rubber product, a silicone rubber product, a plastic product or a paper product.

Claim 20 (New): A method of making paper comprising adding the pyrogenically produced silicon dioxide powder according to claim 1 to a paper machine during the manufacture of the paper.